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<1>Changing Cultures of Nighttime Breastfeeding and Sleep in the US

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<2>Introduction

Expectant parents in the US usually receive advice on all aspects of pregnancy, childbirth, and infant care from multiple medical experts. This guidance reflects cultural assumptions that childbearing requires specialised medical knowledge, which divides the care of mothers and infants under the supervision of separate medical experts, and further fragments various aspects of infant care, including feeding and sleep. This chapter uses historical and ethnographic research to explore the origins of these assumptions and their consequences for American parents who embark on breastfeeding. I suggest that severing the links between these evolutionarily and physiologically connected domains (McKenna et al., 2007; McKenna and Gettler, 2016) had a significant detrimental impact on nighttime infant care. Parents have been left without adequate community cultural knowledge about the interaction of breastfeeding and sleep and assume that these processes are separate. As a result, they are frequently surprised by infants' nighttime behaviour and have difficulties navigating nighttime breastfeeding and sleep. These nighttime challenges constitute an important element of an already formidable set of barriers to breastfeeding in the United States, where structural support is extremely limited and breastfeeding remains a controversial practice (Tomori et al., 2016). The anthropological lessons from this chapter can be used to make breastfeeding more feasible and sustainable for all families by developing integrative models that support the dynamic interactions between mothers and infants throughout the day and night.

<2>The origins of fragmentation

<3>The medicalization of childbirth and the decline of breastfeeding

In colonial America midwives attended women and their families throughout the entire circle of life from birth to death. Midwives supported the full spectrum of childbearing by assisting during labour and birthing, helping mothers learn to breastfeed and care for their infants, and addressing breastfeeding difficulties. All of these events took place in the family home, with the midwife travelling to her charges as she was needed in the community. The rhythm of this life is apparent in Ulrich's (1990) masterful study of Martha Ballard, a midwife living in Maine during the 1700s and early 1800s, who left behind a detailed diary of her daily activities. Ballard travelled throughout the day or night, sometimes in trying weather conditions, on foot, horseback, and even canoe, to attend women in childbirth and to carry out her other duties.

Ballard's brief reports of her midwifery work included multiple challenges ranging from difficult births to breastfeeding problems, such as breast infections. Notably absent from these accounts, however, are concerns about infant feeding decisions, the frequency of infant feeding, or infant sleep. During this time, most women breastfed their infants in response to their infants' needs throughout the day and night. From the 17th century to the middle of the 19th century medical advice in Europe and the US reflected this responsive attitude by encouraging women to simply feed their babies: "As to the time and hour it needs no limits, for it may be at any time, night or day, when he hath a mind" (Salmon, 1994: 256). Any concerns presented in the medical literature during this period tend to address wealthier women's childbearing difficulties, which is a topic in its own right that I will not delve into here. Most Euro-American families slept within arm's reach of their infants who were usually in a cradle, and mothers could easily breastfeed their infants during the night as needed. The relatively limited attention to infant sleep compared to other aspects of infant care, and the portrayal of infant sleep as an activity that took place with ease, indicate that infant sleep was simply not considered particularly problematic during this time (Stearns et al., 1996).

The end of the 19th century, however, gave rise to dramatic transformations in American childbearing practices. Elite women began to invite male physicians into their homes to attend them in childbirth, tempted by promises of new kinds of pain relief (Leavitt, 1988). Physician-attended childbirth became increasingly fashionable among middle class women as well. The increased need for supervision prompted by the growing popularity of anaesthesia and the development of new surgical techniques led to childbirth being brought into the hospital (Leavitt, 1988). Upper class white women also led the way into seeking out other new and 'modern' parenting practices. As with birth, these practices then became templates for middle class women to emulate, and they were transformed into standards that were often more forcefully dictated to poor and racial/ethnic minority women. For instance, physicians actively sought to discredit midwives and older relatives as sources of knowledge by portraying them as ignorant and 'backward' as they sought to gain greater control over childbearing and infant care (Leavitt, 1988; Fraser, 1998). By the middle of the 20th century, the medicalisation of childbirth was complete. Whereas in the 19th century nearly all women were attended by midwives in their homes, by the 1950s 80% of women gave birth at hospitals overseen by physicians and teams of nurses (Leavitt, 1988).

These key transformations of childbearing practices were facilitated by other large-scale social changes. Factory labour became more common instead of agricultural routines, which were often more amenable to children's presence. Migration of people to cities eroded the communities of knowledge and care on which childbearing women traditionally relied. Romantic love and sexual partnership became more valued over childrearing in marriage (Wolf, 2001). Novel ideas about time, which emerged with the role of the clock in factory labour (Thompson, 1967), increasingly spread to other domains of life including childbearing and infant care. The growing dominance of scientific thinking that was associated with ideas of progress and modernity added further emphasis to measurability and regularity in everyday life (Apple, 1987; Millard, 1990).

Unfortunately, early hospital care did not necessarily improve birth outcomes for women and children and had profoundly detrimental effects on breastfeeding (Leavitt, 1988; Apple, 1987). Hospital wards provided a new environment for the rapid spread of infections, which was not successfully addressed until the introduction of antibiotics in the mid 20th century. Misguided attempts at infection-control were a key driving force behind a number of hospital procedures that limited contact between mothers and babies and consequently undermined breastfeeding (Leavitt, 1988; Apple, 1987). Additionally, women often underwent interventions in hospital births, such as anaesthesia or strong pain killers, which limited their awareness of the process and had an adverse impact on babies' abilities to latch and initiate breastfeeding (Apple, 1987; Leavitt, 1988). Mothers and babies were frequently separated for many hours after the birth as they both recovered from the interventions, and were only given opportunity to feed every few hours. Lengthy intervals between feedings and limited time on the breast made establishing breastfeeding difficult, if not impossible. Many women also received injections or pills to dry up their milk regardless of their desires because hospital staff considered breastfeeding-related care burdensome. Even if they breastfed at the hospital, babies might be given infant formula when they were separated from their mothers in the hospital nursery. As more women gave birth in hospitals throughout the twentieth century, hospitals became a locus where physicians consolidated their authority over childbirth and where the medicalization and fragmentation of maternal and infant care became routine and normalised.

Infant formulas offered a perfect fit for the kind of scientific thinking and routines implemented by hospitals (Apple, 1987). Infant formulas were initially created by physicians as an emergency measure for situations when a mother was unable to breastfeed and another lactating woman could not be found to breastfeed the infant. While physicians recognised that breast milk substitutes carried numerous risks, they also found aspects of this innovation appealing. The components used to make infant formula could be precisely measured, combined in predictable, consistent proportions, and given to babies through feeding bottles. This gave caregivers the opportunity to

provide infants with precise amounts of food at regular intervals measured by the clock in accordance with medical recommendations (Apple, 1987; Millard, 1990). Even greater precision and standardisation could be achieved with the rise of industrial production of infant formulas based on cow's milk. This kind of regimented infant food delivery system suited the factory-style hospital routines carried out by nursing staff that were regulated by the clock, and involved measurement and documentation. These institutional routines could then be carried out into the home once mothers and infants were discharged.

Commercial infant formulas were popularised by the rise of advertising, often directly evoking medical authority to endorse products. Early advertising dating back to the turn of the 19th-20th century often featured images of chubby, smiling infants who were fed a particular brand of infant formula. The adverts usually claimed that health benefits could be achieved from using the product, sometimes by juxtaposing the chubby child with another, smaller child who was considered less fortunate because she did not receive this manufactured food (Apple, 1987). Along with commercial infant formulas, parents were also targeted with intensive advertisement for commercial baby foods (Bentley, 2014). Consequently, while at the turn of the century most mothers did not give solid food to their infants until they were six months or older, by the 1950s the infant food industry (greatly aided by physicians) convinced parents that babies were ready for, and would benefit from these foods as early as just a few weeks old (Bentley, 2014). Breastfeeding was increasingly displaced from both ends – at initiation by hospital routines and the pervasive use of infant formulas, and by the introduction of solid foods in the early months of life.

With all of these different forces combined, it is no wonder that breastfeeding became nearly extinct in American culture by the middle of the twentieth century. In 1948, only 38% of mothers were breastfeeding at hospital discharge, and by 1951 this reduced to about 20% of mothers (Apple, 1994). We have little information about the duration of breastfeeding at this time. The lack of breastfeeding persisted for decades as measured

by a survey conducted by Ross Laboratories (an infant formula manufacturer), which found in 1970 that only about 25% of women ever breastfed (Ryan, 1997).

<3>Routines and regulation: the rise of artificial feeding and nighttime separation

With the medicalization of childbirth, infant care also began to receive intense scientific scrutiny. For the first time, experts began to recommend that infants should be placed in separate rooms from parents (Stearns et al., 1996). This was a radical departure from previous routines where most families had infants within arms' reach, and children moved on usually after infancy to sleep in the same room with their siblings. The origins of this recommendation remain unclear, but some of the reasoning reflected concerns about sexuality and morality, partly driven by Freudian psychology (Stearns et al., 1996; McKenna et al., 2007).

Many early twentieth century medical experts systematically undermined breastfeeding and contributed to the growing fragmentation of infant feeding and infant sleep through their focus on routines and night time mother-child separation, even as they ostensibly supported breastfeeding. Luther Emmett Holt, a prominent physician member of the US Child Health Committee, became one of the earliest and most well-known proponents of heavily regulated infant care (Apple, 1987; Stearns et al, 1996). Holt authored a brief manual initially intended for nursery maids who were training at the Babies' Hospital in New York City. The upper class mothers who hired these maids, however, sought out their own copies, which prompted Holt to author a longer version that included mothers as the intended audience. Holt's book *The Care and Feeding of Children: A Catechism for the Use of Mothers and Children's Nurses* was first published in 1894, and became wildly popular, going through 75 printings by 1920 (Apple, 1987).

The Children's Bureau's *Infant Care* pamphlet, first published in 1914, heavily borrowed from Holt's book and thereby further expanded his influence (Bentley, 2014). *Infant Care* not only reflected a growing middle class consensus about childrearing, but also influenced and reinforced these ideals (Apple 1987). The pamphlet was widely

distributed through government agencies, which printed 5 million copies by 1930, and a stunning 34 million copies by 1955. Since each copy of the leaflet was likely used for more than one child, and often shared across families, *Infant Care* became an enormously influential publication that engaged an exceptionally broad audience.

In the 1917 edition of his book, Holt (1917: 46) recommended that in the first two days infants should only be fed four times at 6 hour intervals with one feed between 6 pm to 6 am (the period he called 'night nursings'), because he claimed that little milk was secreted at this time. Thereafter, infants were to be fed 7 times per day at 3-hour intervals, with two feedings during the night, decreasing to a single nighttime feed by four months. At each of these feeds infants were to stay at the breast for twenty minutes maximum. By 7-12 months, all night feeds should be eliminated and infants were only to be breastfed five times per day. With these limitations on the frequency and length of feeds, especially at nighttime, which is crucial to building and sustaining an adequate milk supply, it would have been virtually impossible for a mother to meet a growing infant's breastfeeding needs (Wambach and Riordan, 2014).

Supplementation with liquids and other foods further undermined any chance of breastfeeding success. Holt recommended that infants should not receive other foods beyond breastmilk in the first few months, but he also advised that infants be given water freely. Moreover, Holt suggested that it is actually better for babies to be fed infant formula at night instead of breastfeeding as he considered this to be less disruptive for mothers' sleep (assuming bottle feeding was carried out by someone else other than the mother). These recommendations directly contradicted his praise for breastfeeding elsewhere in his manual.

Holt did not make the connection that such a routine would undermine successful breastfeeding. Instead, he (along with many other contemporaneous experts) turned to concerns about the quality and quantity of milk:

> '*Does the nervous condition of the mother affect the milk?*

> Very much more than her diet; worry, anxiety, fatigue, household cares, social dissipation, etc. have more than anything else to do with the failure of the modern mother as a nurse. Uncontrolled emotions, grief, excitement, fright, passion, may cause milk to disagree with the child, at times they may excite acute illness, and at other times may cause a sudden and complete disappearance of the milk'
> (Holt 1917: 45).

At the first signs of any perceived problems with breastfeeding or milk quality Holt recommended weaning to infant formulas whose preparation he described in great detail. Therefore, Holt's praise for breastfeeding rang hollow as it was coupled with lack of knowledge about the process and a simultaneous expectation that breastfeeding would fail and artificial feeding would be required.

Establishing and maintaining nighttime separation between mothers and infants was a key part of Holt's advice. Holt included detailed instructions for setting up a nursery in a separate room for the infant, which included a crib. As with feeding, Holt believed that regularity was essential in establishing good sleep habits and therefore he emphasized putting babies to sleep at the same time every day. Moreover, he claimed that by the age of 3 months, and at most by 5 months, all infants can go without feeding between 10 pm and 6-7 am. Holt identified night feeding as the primary cause of wakefulness and 'disturbed sleep.' (Holt 1917: 91). If infants cried during the night they were to be checked on, but as long as they were dry and comfortable, and no other problems were noted, they were to be left. Indeed, if a child cried because of 'temper, habit, or to be indulged' (Holt 1917:168), Holt recommended that they were 'to be simply allowed to 'cry it out'. This often requires an hour, and, in extreme cases, two or three hours. A second struggle will seldom last more than ten of fifteen minutes, and a third will rarely be necessary' (Holt 1917:168). He nevertheless cautioned that, 'Such discipline is not to be carried out unless one is sure as to the cause of habitual crying' (Holt 1917:168).

The behaviourist school of psychology, led by John Watson, took these ideas even further. According to Watson modern life demanded routines and regulation, and infants needed to be trained to accommodate mothers' chores. Watson exerted an extraordinary influence on middle class ideas about childrearing once he turned his academic background to writing for popular media. He was a regular contributor to popular US magazines, including Harper's, Cosmopolitan, and McCall's. He wrote a series of articles in the 1920s for McCall's that became the foundation of his book *Psychological Care of the Infant and Child* (1928) co-authored with his wife Rosalie Rayner Watson (Bigelow and Morris, 2001). Watson advised: "It is wise to start him on [a regular schedule] when he's tiny; most hospitals will help you work out such a schedule and train the new baby to it for a few days before he goes home" (Watson quoted in Stearns et al, 1996:352). Watson's ideas follow Holt's and directly tie into the routines established by hospitals.

Watson was also famous (and infamous) for his advice on limiting affection for children for fear that they would become overly dependent:

> 'Let your behavior always be objective and kindly firm. Never hug and kiss them, never let them sit in your lap. If you must, kiss them once on the forehead when they say good night. Shake hands with them in the morning. Give them a pat on the head if they have made an extraordinarily good job of a difficult task'
> (Watson quoted in Bigelow and Morris, 2001: 27).

This kind of approach also set the tone of his advice for nighttime. Once children were put to bed with minimal affection or bodily contact, they would not require further attention until the morning. Watson did not believe that children were naturally afraid of the dark, or that they needed human contact to be soothed. Although Watson's advice was controversial and contested even in this time, his emphasis on regularity and routines both during the day and nighttime gradually gained prominence in infant care (Stearns et al, 1996).

Subsequent popular experts used a more gentle tone, yet the emphasis on routines and regularity persisted (Stearns et al, 1996). Benjamin Spock's The Common Sense Book of Baby and Child Care, first published in 1946, became the most popular infant care manual of the twentieth century. Although Spock aimed to reassure parents, he still maintained that infants should sleep through the night without feeding within the first few months of life. By this time, both artificial feeding and nighttime separation had become widely accepted social norms, which served as the foundation for generations of parents and medical professionals to come. The emphasis on regulating and 'training' infants coupled with the recommendation to separate infants from parents at night ultimately completed the severing of breastfeeding from infant sleep.

<2>Consequences of fragmentation

Medical experts did not simply generate ideas that they then imposed on the public. Rather, their ideas reflected certain strands of cultural ideologies (mostly unconscious assumptions about the world) shared by many others in their time. At the same time, these experts wielded increasing power throughout the course of the twentieth century as their advice came to be accepted as 'authoritative knowledge': knowledge that 'counts' (Jordan, 1997). While upper and middle class US women often sought out these experts, they also had growing say over the normative standards applicable for all mothers, including those who may have grown up in communities that had different norms – such as Native American, African American, and immigrant mothers. In other words, different forms of knowledge became discounted, and regarded as incorrect and unimportant. This also meant that entire traditions of community-based midwifery were actively undermined, and knowledge about childbirth, breastfeeding, and infant care was often eroded or actively displaced, and ultimately replaced by medical experts (Fraser, 1998).

Since the middle of the twentieth century, significant progress has been made in reversing the decline in breastfeeding. Breastfeeding has once again become a cultural ideal (albeit a contested one) thanks to early grassroots efforts led by the La Leche

League, further propelled by other social movements, and bolstered by a growing body of biomedical research that demonstrates the beneficial effects of breastfeeding (see Tomori, 2014). According to the most recent data from 2013, over 80% of mothers initiate breastfeeding in the US, 51 .8% continue to six months, and 30.7% to one year (Centers for Disease Control and Prevention, 2016). Nearly all medical experts stand behind official guidelines that recognize breastfeeding as the optimal form of infant feeding.

Despite these dramatic changes that led to the return of breastfeeding in the US, legacies of the fragmentation of the birth-breastfeeding-infant sleep nexus remain salient today. Most parents give birth in hospital where there are high rates of interventions (including 32% who have Caesarean sections) and are usually attended by obstetricians (CDC, 2017). Medical experts continue to lack adequate knowledge about breastfeeding or how to best support it, and their level of support directly influences breastfeeding outcomes (Szucs et al, 2009; Ramakrishnan et al, 2014). Pervasive socioeconomic inequality and racism in the US medical system had particularly devastating effects on communities of colour. Even well-intentioned programmes, such as the Special Supplemental Nutrition Program for Women, Infants and Children's (WIC) established in 1972, which aimed to address nutrition problems for the poor who were disproportionately of colour, sometimes contributed to the erosion of breastfeeding and the expansion of the market for infant formula. WIC distributed free infant formula and offered limited breastfeeding support for decades, and in doing so greatly contributed to artificial feeding in these communities (Kent, 2006). Although recent efforts have aimed to reverse the damage (Kaplan and Graff, 2008; Jensen and Labbok, 2011), racial breastfeeding inequities endure today (Bartick et al, 2017).

Separate paediatric guidelines governing infant sleep and infant feeding further reflect the legacy of fragmentation. Infant sleep guidelines are driven primarily by concerns about Sudden Infant Death Syndrome (SIDS). These guidelines have assumed that solitary sleep is the norm, while sharing a sleep surface with one's infant is considered

'risky'. Although experts have long-suggested that breastfeeding has considerable positive effects on SIDS, it took years of debate to include breastfeeding's role in the prevention of SIDS in the American Academy of Pediatrics (AAP) infant sleep guidelines (AAP 2011; Tomori, 2014). Breastfeeding is still not sufficiently highlighted in the 2016 recommendations, although infants fed with formula milk have twice the risk of SIDS (Moon and AAP, 2016); instead, breastfeeding is listed as just one of many factors that reduce the risk of SIDS. The guidance overlooks the evolutionary significance of breastfeeding as the human species-specific norm for establishing the baseline risk of SIDS. Additionally, there is limited recognition of the physiological interplay between breastfeeding and proximate infant sleep despite findings that clearly show a close association between breastfeeding and bed sharing (Hauck et al, 2008; Hauck et al, 2011; Huang et al, 2013; Ball et al, 2016).

Recommendations against bed sharing remain in place in the most recent updated recommendations from 2016 even though the importance of proximity within the same room is now recognized as an important element of reducing SIDS (Moon and AAP, 2016). In contrast to previous literature (Blair et al, 2014), the AAP's analysis (Moon and AAP, 2016) concluded that bed sharing constitutes an independent source of risk in the absence of other risk factors. The recommendations, however, do not adequately address the potential effects of the advice against bedsharing on breastfeeding.

Books on infant sleep continue to be written by a wealth of expert advisors, including physicians and psychologists, although other self-styled experts have also gained prominence using endorsements from medical practitioners. The emphasis on routines and regularity remains dominant, along with a focus on 'self-soothing' (getting a baby to fall asleep on her own) and getting a baby to 'sleep through the night,' which imply the elimination of night-feeds. Most of these experts echo Holt's century-old advice in identifying night waking as a 'sleep problem' that should be eliminated by separating the baby from the caregiver. To accomplish this separation, many parents engage in 'sleep-training' – harking back to Watson's advice. This concept relies on various

methods to habituate infants to fall asleep on their own in a separate room and to stay there without crying during the period parents define as nighttime.

One of the most popular resources for 'sleep training' is Ferber's *Solve Your Child's Sleep Problems* (2006). Ferber, just like Holt, identifies nighttime feeding as a main cause of infant sleep problems. He recommends disassociating breastfeeding from sleeping so that infants do not need to breastfeed to go back to sleep. He argues that most nighttime feedings are unnecessary, and they serve to habituate infants to feeding, which causes them to wake: 'This learned hunger then becomes a trigger for extra wakings' (2006:137). These disruptions are thought to occur more frequently among children under 2 years of age who are, "still breastfeeding or using a bottle" (2006:137, emphasis mine). Ferber also echoes Holt when he advises that parents should check on infants for safety if they wake 'unnecessarily', but should allow infants to cry on their own so that they 'learn' to sleep through the night. Up until the 1996 edition, Ferber advocated letting infants cry without parental soothing to the point of vomiting, although this was removed from later editions (Tomori, 2014).

The current top hit when on-line searching for 'infant sleep' and a best-seller on Amazon's children's health section is *On Becoming Babywise: Giving your Infant the Gift of Nighttime Sleep*, now in its fifth edition. Although co-author Ezzo is a pastor and has no medical training, the other co-author, Bucknam, is a physician who lends the book medical authority, along with the numerous physician endorsements selected by the publisher. The book advocates establishing a pattern of regular routines, which puts parents in charge of when babies are fed, and encourages them to separate infants spatially and eliminate nighttime feedings as quickly as possible. Some statements in an earlier edition virtually replicate Watson's recommendations from the 1920s:

> 'During the crucial early weeks of stabilization, it is important that you shape and form your baby's routine. Too much flexibility will not allow this to happen. That

is why a baby's routine must first be established before flexibility is introduced into baby's day.'
(Ezzo and Bucknam 2001).

While the Babywise system advocated by Ezzo and Bucknam has come under scrutiny for unsupported medical claims and interfering with breastfeeding that could lead to potential underfeeding (Aney, 1998), it remains popular. There are strands of competing advice from other sources that emphasise nighttime breastfeeding and proximity, especially from the La Leche League International and proponents of attachment parenting. This advice, however, remains vastly overshadowed by the literature that aims to cultivate solitary sleep. The cornerstone of all the top hits in the baby care/new parent genre is establishing a regular bedtime and nighttime routine that limits and ultimately eliminates breastfeeding at night.

The consequences of the fragmentation of breastfeeding and infant sleep were apparent in my ethnographic research in the American Midwest (Tomori, 2014). The main focus of childbirth education is labour and birth, which are addressed in several, multi-hour sessions, while the topics of infant care and breastfeeding are usually limited to one session each. Breastfeeding may be mentioned in infant care sessions, usually as an infant feeding choice, but attendance at a separate class is recommended and the subject is therefore is left out of routine infant care. Infant sleep is discussed independently of infant feeding in the infant care sessions. Co-sleeping may be mentioned as a practice that sometimes occurs but instructors often tiptoe around this topic due to the strong medical recommendations against bed sharing. As a result, parents are unprepared for the realities of navigating breastfeeding and sleep.

My ethnographic findings suggest that parents' expectations are contradicted by their infant's behaviour (Tomori, 2014). Parents were surprised when their infants fell asleep while breastfeeding, woke up when they were put down and seemed to want to breastfeed again. What were they to do? On the one hand, their breastfeeding classes told them that they should breastfeed in response to their baby's needs. On the other

hand, how were they going to get their baby to go to sleep without breastfeeding? And what if the baby only stays asleep in their arms or next to their body? Bringing their baby to bed with them might make both breastfeeding and sleep feasible, but medical guidance made them fearful that bedsharing would inadvertently harm their baby. Ultimately, nearly all of the parents brought their infants into bed with them without having planned to do so and continued to bedshare to facilitate breastfeeding at least some of the time during the course of the first few months. At the same time, parents also struggled with how to reconcile their bedsharing practices with cultural norms and expectations. Many parents chose to keep their practice hidden for fear of judgment from relatives and friends, and especially medical practitioners. While the middle class, predominately white parents in my study had sufficient educational, socioeconomic, relational, and other resources necessary to overcome most breastfeeding barriers, their nighttime struggles suggest that the consequences of fragmentation between breastfeeding and sleep could pose significant challenges for most breastfeeding parents.

<2>Conclusion

This chapter explored the historical origins of the fragmentation of birth, breastfeeding and maternal-infant sleep, and its consequences for breastfeeding and sleep. Increased opportunities for medical and commercial interventions in infant feeding and infant sleep arose from the medicalisation of childbirth, the rise of scientific thinking, and the erosion of community support along with other social changes. This facilitated the increasing use of artificial feeding, promoted severe limitations on nighttime feeding, and the spatial separation of mothers and babies. Together, these changes produced an unprecedented fragmentation of breastfeeding and infant sleep. Although recent decades have seen a return to breastfeeding, the legacies of fragmentation continue to have significant consequences for contemporary parents. Historical and cross-cultural studies can provide a basis for offering better guidance and support for the dynamic

day- and nighttime interactions between mothers and babies that sustains breastfeeding, sleep, and wellbeing.

One such effort is Durham University's Parent-Infant Sleep Lab in the UK, which provides evidence-based information for parents and health professionals about human infant sleep in an anthropological perspective. The Lab's research has highlighted the misalignments between relatively recent western cultural practices and the evolutionary context of human infant sleep and feeding behaviour. The Lab's educational outreach via its Infant Sleep Information Source (www.isisonline.org.uk) has transformed parental expectations for nighttime infant care and resulted in more appropriate infant sleep guidance in the UK. This work, which was recently awarded the Queen's Anniversary Prize for Higher Education, could be used as a resource and a model for developing similar approaches in the US and elsewhere.

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